

Application No.: 09/581,878
Attorney Docket No.: FUK-71
Reply for Office Action Dated: March 11, 2004

REMARKS

Claims 1-11 are pending in the instant application and stand rejected.

Claims 3 and 8 have been objected to under 37 C.F.R. §1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim, according to the Examiner. As stated by the Examiner, the basis for the objection is that both Claims 3 and 8 contain the limitation “wherein said vacuum vessel can be divided into a part including said processing chamber and a part having said substrate transport mechanism”, while the Examiner believes that these limitations are already present in independent Claim 1 (lines 7-20) and Claim 2 (lines 7-22).

In response, Applicant has amended Claims 3 and 8 to more clearly define the subject matter thereof. Support for these amendments may be found in the specification at page 11, lines 8-18 and Figs. 4 and 5. In particular, the further limitations to Claims 1 and 2 found in Claims 3 and 8, respectively, may be found in a comparison of Fig. 4 to Fig. 1.

In view of the foregoing, Applicant respectfully requests that the objection to Claims 3 and 8 be withdrawn.

Claim 10 is objected to because it appears that a duplicate of Claim 11 was mistakenly added to the end of Claim 10.

In response, Applicant has amended Claim 10 to remove the duplicate of Claim 11 that was mistakenly added to the end of Claim 10.

In view of the foregoing, Applicant respectfully requests that the objection to Claim 10 be withdrawn.

Claims 1-4 and 6-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,580,420 to Watanabe et al. (“Watanabe”) in view of U.S. Patent No. 5,314,574 to Takahashi.

Application No.: 09/581,878
Attorney Docket No.: FUK-71
Reply for Office Action Dated: March 11, 2004

Applicant has amended independent Claims 1 and 2. As amended, Claims 1 and 2 recite (in relevant part):

“... a substrate stage fixedly provided on said vacuum vessel plate, said substrate stage having an operatively immovable substrate receiving portion; ...” (Claim 1). (Emphasis added).

“... a plurality of substrate stages fixedly provided on said vacuum vessel bottom plate, each of said substrate stages respectively having an operatively immovable substrate receiving portion; ...” (Claim 2). (Emphasis added).

Support for these amendments may be found in the original disclosure at Figs. 2, 5 and 6, for example. No new matter is hereby being introduced with these amendments.

Watanabe and Takahashi, considered alone or in combination, neither teach nor suggest a substrate stage having an operatively immovable substrate receiving portion, as set forth in each of Claims 1 and 2 (as amended).

In Watanabe, the relevant teachings pertain to wafer lifting mechanisms 14A, 14B (Fig. 1A) and drive mechanism 69 (Fig. 4) for vertically moving the specimen stage 68. Watanabe states in relevant part:

“... 69 a drive mechanism for vertically moving the specimen stage; ...” (Col. 9, lines 51-53).

“The specimen stage 68 is provided with the drive mechanism 69, so that the upper portion of the specimen stage is made vertically movable.” (Col. 10, lines 3-5).

The adjustable movement of specimen stage 68 by drive mechanism 69 is an essential feature of Watanabe because it is used to achieve a desired position of the processing plasma relative to the specimen-loading surface. (See Col. 15, lines 1-10; Col. 16, lines 15 *et seq.*; Col. 16, lines 63-67; and Col. 17, lines 5-10.)

Application No.: 09/581,878
Attorney Docket No.: FUK-71
Reply for Office Action Dated: March 11, 2004

In Takahashi, a raising and lowering mechanism is provided in the form of an air cylinder 24 for raising and lowering the intermediate cover 19 that supports loading platform 18 upon which the semiconductor wafer W is disposed. (See Fig. 1; Col. 4, lines 5 *et seq.*, specifically lines 46-53).

Accordingly, neither Watanabe nor Takahashi teaches or suggests a substrate stage having an operatively immovable substrate receiving portion, as set forth in Claims 1 and 2 (as amended). Rather, Watanabe and Takahashi teach away from such a feature.

In view of the foregoing, Applicant respectfully submits that Claims 1 and 2 are patentably distinguishable over Watanabe in view of Takahashi, and respectfully requests that the rejection of independent Claims 1 and 2 (and Claims 3-4 and 6-10 dependent therefrom) be withdrawn.

Claims 5 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe in view of Takahashi, as applied to Claims 1-4 and 6-10 above, and further in view of JP10-177994 to Masahiro et al. ("Masahiro").

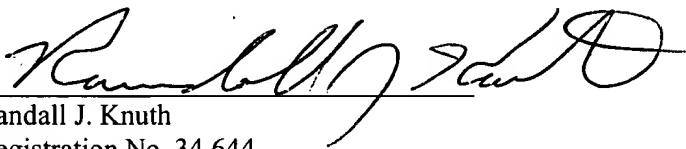
Applicant believes that Claims 5 and 11 are patentably distinguishable over Watanabe in view of Takahashi and Masahiro because they depend from patentably distinguishable base Claim 1, and respectfully requests that the rejection of Claims 5 and 11 be withdrawn.

Applicant has added new dependent Claims 12 and 13. No new matter is hereby being introduced with these newly added claims. Support for new Claims 12 and 13 may be found in the original disclosure at Figs. 2, 5 and 6.

Application No.: 09/581,878
Attorney Docket No.: FUK-71
Reply for Office Action Dated: March 11, 2004

If the Examiner has any questions or comments that would speed prosecution of this case, the Examiner is invited to call the undersigned at 260/484-4526.

Respectfully Submitted,


Randall J. Knuth
Registration No. 34,644

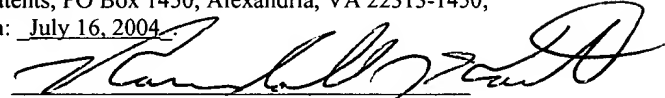
RJK/jrw2

Enclosures: Amendments to the Claims
(3 Sheets)
Explanatory Cover Sheet - Page 1
Petition for Extension of Time
Check No. 3030 (\$210.00)
Return Postcard

Customer No.: 022855
RANDALL J. KNUTH, P.C.
4921 DeSoto Drive
Fort Wayne, IN 46815
Telephone (260) 484-4526
Facsimile (260) 484-0185
Email: rjknuth@rjkpc.com

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on: July 16, 2004.


Randall J. Knuth, Registration No. 34,644

July 16, 2004

Date